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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,931	01/30/2004	Yoshiyuki Yanagisawa	118515	3954

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EXAMINER	
BLACKMAN, ROCHELLE ANN J	
ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/766,931	YANAGISAWA, YOSHIYUKI
	Examiner	Art Unit
	Rochelle Blackman	2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 16-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 16-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/16/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-10, 16, 17, and 19-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Notagashira (U.S. Patent Application Publication No. 2003/0007133).

Notagashira discloses an optical device (see FIGS. 1-16), comprising: a plurality of light modulating devices (9R, G, B) to modulate a plurality of color light components in accordance with image information for every color light component; a color synthesizing optical device (11) having a plurality of light flux incident end surfaces (see surfaces of "optical device" 11 opposite elements 10RO, GO, BO) opposing the respective light modulating devices to synthesize and to emit the color light components modulated by the respective light modulating devices; and a plurality of incident side transparent members (see 10a or 20a of FIGS. 2 and 7) made of a thermal conductive material (glass, fluorite, and/or sapphire – see pg. 4, paragraph [0086] and pg. 5, paragraph [0098]), which are interposed between respective members of the light flux incident end surfaces and the light modulating devices and are connected to the light modulating devices, at least two incident side transparent members of the plurality of incident side transparent members being different in thermal resistance; the light

modulating devices excluding at least one space (see pg. 5, paragraphs [0096]-[0098] along with FIGS. 4A and 4B); at least two incident side transparent members of the plurality of incident side transparent members being made of thermal conductive materials having different thermal conductivities (also see pg. 5, paragraphs [0096]-[0098] along with FIGS. 4A and 4B); at least two incident side transparent members of the plurality of incident side transparent members having different sectional areas in a direction along an end surface crossing the plurality of light flux incident end surfaces of the color synthesizing optical device (see 10a or 20a of FIGS. 2 and 7); an emitting side transparent member (see 8a or 28a of FIGS. 2 and 7) made of a thermal conductive material, which oppose a light flux emitting end surface of the color synthesizing optical device; the emitting side transparent member (for i.e., see 8a, 8GI or 8a, 8BI) having a thermal resistance smaller than those of the incident side transparent members (for i.e., see 10RO); the emitting side transparent member being made of thermal conductive material having a thermal conductivity larger than those of the incident side transparent members (also see pg. 5, paragraphs [0096]-[0098] along with FIGS. 4A and 4B); a sectional area of the emitting side transparent member, in a direction along an end surface crossing the plurality of light flux incident end surfaces of the color synthesizing optical device, being larger than those of the incident side transparent members (see 18RI of FIG. 6); a projector (see FIGS. 1 and 6) to modulate a light flux emitted from a light source (1) in accordance with image information to form an optical image, and to enlarge and to project the optical image, comprising: the optical device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notagashira (U.S. Patent Application Publication No. 2003/0007133) in view of Nishihara et al. (U.S. Patent Application Publication No. 2004/0114249).

Notagashira discloses the claimed invention except for a pedestal provided in at least one end surface of end surfaces crossing the light flux incident end surfaces of the color synthesizing optical device and made of a thermal conductive material, the incident side transparent members being connected to side surfaces of the pedestal.

Nishihara teaches providing a pedestal (4 or 5) provided in at least one end surface of end surfaces crossing the light flux incident end surfaces of a color synthesizing optical device (2) and made of a thermal conductive material (aluminum), incident side transparent members (15) being connected to side surfaces of the pedestal ("transparent members" 15 is connected to side surfaces of "pedestal" 4 or 5 by way of elements 3 and 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made provide the "optical device" of the Notagashira reference with a "pedestal" with the transparent members connected to "side surfaces" of the "pedestal"

as taught by Nishihara, for the purpose of radiating heat and preventing sticking of dust (see pg. 1 paragraph [0006]).

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Notagashira (U.S. Patent Application Publication No. 2003/0007133) in view of Fuse et al. (U.S. Patent No. 6,280,038).

Notagashira discloses the claimed invention except for an optical component case body to house the optical device including ventilating openings for passing cooled air, the ventilating openings are formed at positions in accordance with the respective light flux incident end surfaces and the light flux emitting end surface of the color synthesizing optical device.

Fuse teaches providing an optical component case body (200) to house an optical device including ventilating openings (65, 67, 123-126) for passing cooled air, the ventilating openings are formed at positions in accordance with respective light flux incident end surfaces and light flux emitting end surface of an color synthesizing optical device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the "optical device" of the Notagashira reference with an "optical component case body" including "ventilating openings" as taught by Fuse for purpose of introducing air into the "optical device" and cooling the "optical device" (see col. 1, lines 38-51).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RB

JUDY NGUYEN
SUPERVISORY PATENT EXAMINER